



# Washington State Dept. of Agriculture Organic Program

## Certification Fact Sheet

### Use of Micronutrients in Organic Production

The USDA organic regulations (7CFR 205) state synthetic micronutrients are allowed as plant or soil amendments when a deficiency for the micronutrient is documented. Micronutrient use cannot contaminate crops, soil or water. Micronutrients made from nitrates or chlorides are not allowed and defoliant, herbicide, or desiccant uses are not allowed.

This fact sheet describes how the WSDA Organic Program evaluates micronutrient use on an organic crop.

#### Allowed Forms of Micronutrients

- Boron is allowed in any form except nitrates or chlorides [205.601(j)(6)(i)].
- Cobalt, copper, iron, manganese, molybdenum, selenium, and zinc are only allowed in the following forms: sulfate, carbonate, oxide, or silicate [205.601(j)(6)(ii)].
- Chelated micronutrients are only allowed if chelated with lignin sulfonate [205.601(j)(4)], or with nonsynthetic substances such as citric acid and naturally occurring amino acids.

#### Documenting Micronutrient Deficiencies

Ensure your Organic System Plan identifies the micronutrient deficiencies on your farm and all input materials you plan to apply are listed on your Material Inventory.

Micronutrients may only be used when a need for a specific micronutrient has been documented. Documentation must be specific to the site or location for which the micronutrient was applied, specific to the micronutrient used, and updated regularly if the micronutrient application continues. Documentation about deficiencies must be available for review during your annual inspection.

Micronutrient deficiencies may be documented through:

- **Soil or tissue analyses:** These include tests of your soil, crop leaf, or other tissue such as fruit or vegetable analysis.
- **Recorded visual observations:** Documented visual observations of the crop from the grower, field consultant/agronomist, or other professional.
- **Documentation of regional deficiency:** Research material or publications noting an area wide micronutrient deficiency.
- **Documentation from an agronomist or crop advisor that explains why micronutrient use is needed:** Recommendations must be specific to the operation and field for which it is applied.



### Other Nutrients with Restricted Use

- Calcium chloride is prohibited for general use, however, natural calcium chloride is allowed as a foliar spray to treat a physiological disorder associated with calcium uptake [205.602(c)].
- Mined potassium chloride is allowed if applied to minimize chloride accumulation [205.602(e)].
- Magnesium sulfate, although not a micronutrient, is allowed with a documented deficiency [205.601(j)(5)].

### Additional Resources

#### Washington State Department of Agriculture Organic Program

Phone: 360-902-1805 | E-mail: [organic@agr.wa.gov](mailto:organic@agr.wa.gov) | Website: <http://agr.wa.gov/FoodAnimal/Organic/>

#### USDA National Organic Program (NOP) and links to the USDA organic regulations

Phone: 202-720-3252 | Website: <http://www.ams.usda.gov/AMSv1.0/nop>

#### NOP Guide for Organic Crop Producers

<http://www.ams.usda.gov/AMSv1.0/getfile?dDocName=STELPRDC5101542>

#### NOP Guidance—Materials for Organic Crop Production (NOP 5034)

<https://www.ams.usda.gov/sites/default/files/media/NOP-5034.pdf>

